DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

| Lake: STORRS POND | | Lake Area (ha): | 13.76 |
|-------------------------|-------|------------------------------------|--------|
| Town: HANOVER | | Maximum depth (m): | 6.4 |
| County: Grafton | | Mean depth (m): | 2.8 |
| River Basin: Connecticu | t | Volume (m³): | 383000 |
| Latitude: 43°43'36" | N | Relative depth: | 1.5 |
| Longitude: 72°15'51" | W | Shore configuration: | 1.22 |
| Elevation (ft): | 400 | Areal water load (m/yr): | 24.45 |
| Shore length (m): 1 | 600 | Flushing rate (yr ⁻¹): | 8.80 |
| Watershed area (ha): | 829.5 | P retention coeff.: | 0.46 |
| % watershed ponded: | 3.4 | Lake type: natural | w/dam |

| BIOLOGICAL: | 3 February 1994 | 6 July 1993 |
|------------------------------------|----------------------|----------------------|
| DOM. PHYTOPLANKTON (% TOTAL) #1 | VERY SPARSE; MOSTLY | NET PHYTOPLANKTON |
| #2 | COELOSPHAERIUM | SPARSE - NO DOMINANT |
| #3 | | |
| PHYTOPLANKTON ABUNDANCE (cells/mL) | | 11645 |
| CHLOROPHYLL-A (µg/L) | | 1.09 |
| DOM. ZOOPLANKTON (% TOTAL) #1 | KELLICOTTIA 76% | NAUPLIUS LARVA 33% |
| #2 | CALANOID COPEPOD 15% | EPISTYLIS 19% |
| #3 | | |
| ROTIFERS/LITER | 131 | 37 |
| MICROCRUSTACEA/LITER | 35 | 92 |
| ZOOPLANKTON ABUNDANCE (#/L) | 170 | 159 |
| VASCULAR PLANT ABUNDANCE | | Sparse |
| SECCHI DISK TRANSPARENCY (m) | | 5.0 |
| BOTTOM DISSOLVED OXYGEN (mg/L) | 11.5 | 9.5 |
| BACTERIA (E. coli, #/100 ml) #: | | 10 |
| . #2 | | |
| #: | 3 | |

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m): 3.1 Hypolimnion volume (m³): None Anoxic volume (m³): None

| CHEMICAL: Lake: STORRS POND Town: HANOVER | | | | | | |
|---|-----------------|-------|-------------|--|--------|--|
| | 3 February 1994 | | 6 July 1993 | | | |
| DEPTH (m) | 1.0 | 3.0 | 1.5 | | 3.5 | |
| pH (units) | 7.5 | 7.4 | 7.5 | | 7.4 | |
| A.N.C. (Alkalinity) | 46.3 | 47.4 | 25.9 | | 22.2 | |
| NITRATE NITROGEN | 0.05 | 0.07 | < 0.04 | | < 0.04 | |
| TOTAL KJELDAHL NITROGEN | 0.22 | 0.28 | 0.16 | | 0.16 | |
| TOTAL PHOSPHORUS | 0.009 | 0.012 | 0.008 | | 0.008 | |
| CONDUCTIVITY (µmhos/cm) | 195.7 | 194.4 | 119.7 | | 104.8 | |
| APPARENT COLOR (cpu) | 8 | 9 | 7 | | 7 | |
| MAGNESIUM | | | 1.67 | | | |
| CALCIUM | | | 12.7 | | | |
| SODIUM | : | | 6.7 | | | |
| POTASSIUM | | | 1.17 | | | |
| CHLORIDE | 21 | 21 | 12 | | 11 | |
| SULFATE | 15 | 15 | 10 | | 10 | |
| TN : TP | 30 | 29 | 20 | | 20 | |
| CALCITE SATURATION INDEX | | | 1.3 | | | |

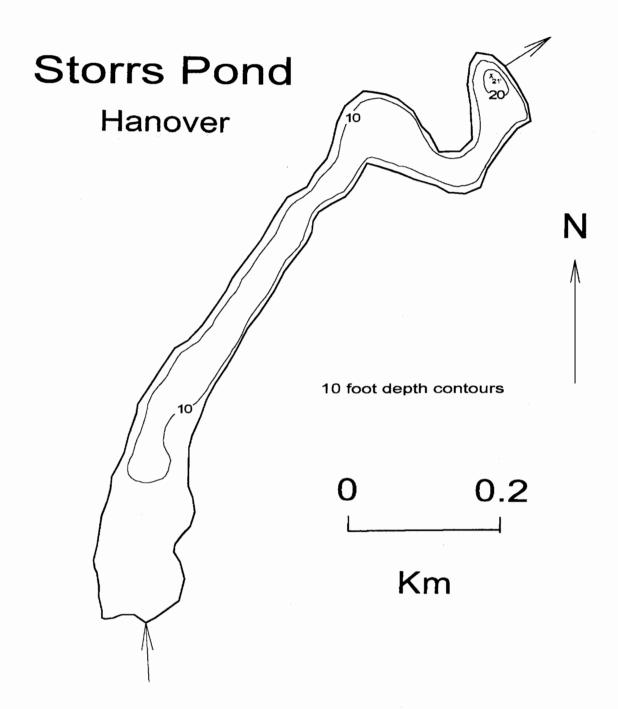
All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1993

| D.O. | S.D. | PLANT | CHL | TOTAL | CLASS | |
|------|------|-------|-----|-------|--------|--|
| ** | 2 | 0 | 0 | 2 | Oligo. | |

COMMENTS:

- 1. This is a narrow, steep-sided pond. There was no public boat launch facility. Two swimming beaches were present which were part of the Storts Pond Recreation Area. No camps were present along the shore.
- 2. Clay soils were very obvious around the entire pond.
- 3. The wholewater phytoplankton were dominated by a very thin, filamentous, probably blue-green algae (98%).



FIELD DATA SHEET

LAKE: STORRS POND

DATE: 07/06/93

TOWN: HANOVER

WEATHER: HAZY, HOT & HUMID

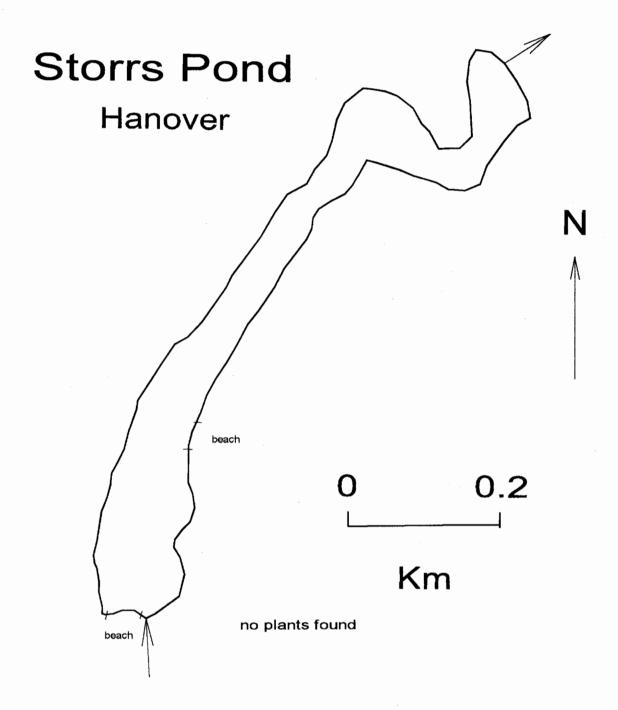
| DEPTH (M) | TEMP (°C) | *DISSOLVED OXYGEN | OXYGEN SATURATION |
|-----------|-----------|----------------------|----------------------|
| 0.1 | 24.0 | 8.6 | 101 % |
| 1.0 | 23.4 | 8.7 | 100 % |
| 2.0 | 23.0 | 8.7 | 100 % |
| 3.0 | 19.5 | 11.0 | 119 % |
| 4.0 | 15.0 | 11.8 | 115 % |
| 4.5 | 14.0 | 9.5 | 91 % |
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SECCHI DISK (m): 5.0 COMMENTS:

BOTTOM DEPTH (m): 5.0

TIME: 1200

*Dissolved oxygen values are in mg/L



| | AQUATIC | PLANT SURVEY | | | | |
|--|--|--|----------------|--|--|--|
| LAK | E: STORRS POND | TOWN: HANOVER | DATE: 07/06/93 | | | |
| Key | PLANT | NAME | ABUNDANCE | | | |
| | GENERIC | COMMON | ABUNDANCE | | | |
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| | A STATE OF THE STA | OVERALL ABUNDANCE: | Sparse | | | |
| GENERAL OBSERVATIONS: | | | | | | |
| 1. No plants were observed. Their absence may be due to the steeply sloped shoreline and clay soils. | | | | | | |
| 1. | The plants were coserved. Their absolute may be to | ace to the steepty stoped shoreline and oldy so. | | | | |
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